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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/755,798	01/12/2004	Susan Legault	706718US1	9383

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EXAMINER	
WEST, JEFFREY R	

ART UNIT	PAPER NUMBER
2857	

DATE MAILED: 10/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/755,798	LEGAULT ET AL.
	Examiner	Art Unit
	Jeffrey R. West	2857

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 August 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *12 January 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 1-21 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

35 U.S.C. 101 requires that the claimed invention as a whole must accomplish a practical application. That is, it must produce a "useful, concrete and tangible result." State Street, 149 F.3d at 1373, 47 USPQ2d at 1601-02. The purpose of this requirement is to limit patent protection to inventions that possess a certain level of "real world" value, as opposed to subject matter that represents nothing more than an idea or concept, or is simply a starting point for future investigation or research (Brenner v. Manson, 383 U.S. 519, 528-36, 148 USPQ 689, 693-96); In re Ziegler, 992, F.2d 1197, 1200-03, 26 USPQ2d 1600, 1603-06 (Fed. Cir. 1993)).

It has also been held that a process that consists solely of the manipulation of an abstract idea is not concrete or tangible. See In re Warmerdam, 33 F.3d 1354, 1360, 31 USPQ2d 1754, 1759 (Fed. Cir. 1994). See also Schrader, 22 F.3d at 295, 30 USPQ2d at 1459.

Claims 1-21 fail to meet the required criteria of a concrete tangible result. The invention as claimed, and disclosed in the specification, does not provide any computer-implementation that produces a signal output, display, or any other concrete result. Rather, the invention as claimed and disclosed is only the

manipulation of ideas from a first group of individuals, by a second group of individuals, to provide a final idea. Further, even if the use of a computer were explicitly and positively claimed, the use of such would be for the mere holding and presentation of data, and does not provide a "safe harbor" under the computer implemented "Guidelines" requirements. In the instant invention, such computer-implementation would consist of the groups of individuals entering data into a spreadsheet, such as the data sheet shown in Figure 4, without producing a tangible result and therefore be non-statutory. (See MPEP 2106 "Where certain types of descriptive material, such as music, literature, art, photographs and mere arrangements or compilations of facts or data, are merely stored so as to be read or outputted by a computer without creating any functional interrelationship, either as part of the stored data or as part of the computing processes performed by the computer, then such descriptive material alone does not impart functionality either to the data as so structured, or to the computer. Such "descriptive material" is not a process, machine, manufacture or composition of matter. (Data consists of facts, which become information when they are seen in context and convey meaning to people. Computers process data without any understanding of what that data represents. Computer Dictionary 210 (Microsoft Press, 2d ed. 1994).))

The dependent claims do not include any additional limitations providing a concrete and tangible result, but merely provide limitations specifying the sizes of the groups of individuals (i.e. entities) and the type of information relied upon by the individuals when brainstorming.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication No. 2004/0225475 to Johnson et al. in view of U.S. Patent No. 6,643,592 to Loman et al.

With respect to claims 1 and 13, Johnson discloses a method for performing a failure mode and effects analysis on an intended/new process (0030, lines 30-36) comprising gathering data relating to failures occurring in the process (0026,lines 1-8), identifying potential failures in the intended/new process by a first entity based on the gathered data (0023, lines 11-14), performing a failure mode and effects analysis on the intended/new process by a second entity based on the potential failures identified by the first entity (0023, lines 18-26) and taking preventive action to prevent the potential failures in an order determined by results of the failure mode and effects analysis (0024, lines 1-15 and 0026, line 23 to 0027, line 7).

With respect to claims 5 and 14, Johnson discloses that the step of identifying potential failures comprises quantifying a severity associated with each potential failure, by the first entity (0023, lines 14-16).

With respect to claims 6 and 15, Johnson discloses that the step of performing a failure mode and analysis further comprises quantifying an occurrence ranking associated with each potential failure (0022, lines 5-8).

With respect to claims 7 and 16, Johnson discloses that the step of performing a failure mode and analysis further comprises quantifying a detection ranking associated with each potential failure (0022, lines 8-10).

With respect to claims 8 and 17, Johnson discloses calculating a risk priority number from the severity, occurrence ranking, and detection ranking, to rank the order in which the potential failures will be corrected (0022, lines 22-24 and 0024).

With respect to claims 9 and 18, Johnson disclose that the severity, occurrence ranking, and detection ranking are quantified using scoring guidelines proved by the first entity (i.e. numerical scoring as determined by the first entity) (0022 and Figure 5).

With respect to claims 10, 11, 19, and 20, Johnson discloses that the second entity is larger than the first entity and at least partially comprises the first entity (i.e. the second entity includes the experts of the individual first entities and at least an additional owner (0023, line 18 to 0024, line 8).

With respect to claims 12 and 21, Johnson discloses identifying factors (i.e. severity, occurrence detectability, maintainability, etc.) associated with each identified potential failure (0022).

As noted above, the invention of Johnson teaches many of the features of the claimed invention and while Johnson does disclose gathering data related to failures

occurring in the process, Johnson does not explicitly state that the data be gathered from a similar/existing process and/or by interviewing workers associated with the process.

Loman teaches a system and method for fault diagnosis comprising a first entity that gathers data from (i.e. at the location of) a similar/existing process/machine as well as information obtained by interviewing workers associated with the process/machine and, using such information, attempts to determine a potential fault (column 3, lines 49-55).

It would have been obvious to one having ordinary skill in the art to modify the invention of Johnson to explicitly state that the data be gathered from a similar/existing process and/or by interviewing workers associated with the process, as taught by Loman, because Loman suggests that the combination would have improved the diagnosis and any repair of the machine/process by allowing the first entity to use a wider variety of information including past experiences with the machine/process to determine any potential problems (column 1, lines 41-51) as well as information from those most readily exposed to the machine/process operation (column 3, lines 49-55). Further, one having ordinary skill in the art would understand that the prediction of potential faults in one process would be improved by obtaining data from a similar/existing process since both processes will contain similar/existing parts and undergo similar/existing conditions.

With respect to claim 4, since the invention of Johnson discloses that the step of gathering data further comprises reviewing previous failure mode effect analysis

performed on the process and stored in a FMEA database (0021) and Loman teaches the step of gathering data from a similar/existing process/machine ((column 3, lines 49-55), the combination teaches that the step of gathering data further comprises reviewing previous failure mode effect analysis performed on the similar/existing process.

Response to Arguments

5. Applicant's arguments filed August 03, 2005, have been fully considered but they are not persuasive.

Applicant argues:

"The Examiner concedes that Johnson et al. does not teach use of an existing process for data gathering in conjunction with the analyses and preventive correction of an 'intended,' or new, process as called for in independent Claims 1 and 13. Loman et al. adds nothing to Johnson's deficiency. Loman et al. does not teach use of an 'existing' process in conjunction with a new or 'intended' process. Indeed, Loman et al. is not even concerned with analysis of a 'process,' but rather to a method for diagnosing a fault, where a field engineer has failed to diagnose the problem. The affected machine is returned to a repair center along with the analyses attempted by the field engineer at the remote site. Hence, to the extent any process is being analyzed at the two sites, it is the same process, not intended and existing processes. Furthermore, potential failures are not at issue with Loman et al.---only existing failures."

The Examiner first asserts that the invention of Loman teaches "a method and system for diagnosing and repairing operational faults on a machine" in accordance with the "diagnosis, maintenance and repair of a complex system used in industrial process, medical imaging, telecommunications, aerospace applications, transportation, and power generation..." (column 1, lines 6-17). Loman then teaches

that when diagnosing a new/intended (column 4, lines 9-11) machine/process a field engineer relies "on his field repair experiences with this and similar machines" (i.e. experience with existing machines).

Therefore, since Johnson discloses a method for performing a failure mode and effects analysis on an intended/new process (0030, lines 30-36) comprising gathering data relating to failures occurring in the process (0026,lines 1-8), identifying potential failures in the intended/new process by a first entity based on the gathered data (0023, lines 11-14), performing a failure mode and effects analysis on the intended/new process by a second entity based on the potential failures identified by the first entity (0023, lines 18-26) and taking preventive action to prevent the potential failures in an order determined by results of the failure mode and effects analysis (0024, lines 1-15 and 0026, line 23 to 0027, line 7), the modification of Johnson to include using data from a similar/existing process in performing the potential failure detection meets the invention as claimed.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure.

U.S. Patent Application Publication No. 2004/0128108 to Cutuli et al. teaches design failure mode effect analysis including the step of identifying potential failures comprising quantifying a severity associated with each potential failure, quantifying an occurrence ranking associated with each potential failure, quantifying a detection

ranking associated with each potential failure and calculating a risk priority number from the severity, occurrence ranking, and detection ranking.

U.S. Patent Application Publication No. 2003/0004765 to Wiegand teaches a method and apparatus for optimizing equipment maintenance.

U.S. Patent Application Publication No. 2003/0171897 to Bieda et al. teaches a product performance integrated database apparatus and method.

U.S. Patent Application Publication No. 2002/0059093 to Barton et al. teaches methods and systems for compliance program assessment.

U.S. Patent No. 5,546,321 to Chang et al. teaches a method and apparatus for the cross-sectional design of multi-layer printed circuit boards.

U.S. Patent No. 5,433,245 to Prather et al. teaches an online valve diagnostic monitoring system having diagnostic couplings including means for comparing similar operational units in different plants to identify generic problems with units in particular applications or from a particular manufacturer.

U.S. Patent No. 6,434,458 to Laguer-Diaz et al. teaches a method and apparatus for vehicle data transfer optimization including a well-known system for analyzing data patterns or fault occurrences with respect to the operation of other similar devices under monitoring in order to determine if preventive maintenance is needed on a current device under monitoring to prevent the occurrence of a line-of-service breakdowns since a fault in one device will more than likely occur in another similar device undergoing the same wear/usage.

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey R. West whose telephone number is (571)272-2226. The examiner can normally be reached on Monday through Friday, 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S. Hoff can be reached on (571)272-2216. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

jrw
October 10, 2005

PATRICK ASSOULD
PRIMARY EXAMINER